# **Zhixing Hong**

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#### **EDUCATION**

#### UNIVERSITY OF TORONTO

Toronto, Canada

Honors Bachelor of Science (Majors in Statistics Theory & Method | Minor in Economics) (GPA – 3.73/4.0)

Sept 2018 - June 2022

- Dean's List Scholar, Faculty of Art and Science (2021 Winter/ 2019 Summer)
- Gold prize in United Kingdom Mathematics Trust Senior Challenge (Top 10%) (2017)

### PROFESSIONAL EXPERIENCE

### **New China Insurance**

Data Analyst Intern

Hangzhou, China

June 2021 – Aug 2021

- Analyzed tons of branch personnel's data using Excel and implemented data cleaning and data transformation techniques to improve the quality standards and risk control measures for the company.
- Conduct statistical analysis using R of loss information and identify trends for loss prevention to reduce operational and reputational risk across the company.
- Compiled a new script integrating multiple QC steps, improving the productivity and efficiency of the pipeline.
- Supported and facilitated the internal team in the identification and evaluation of different types of risks.
- Collaborated with other functional areas of the company to develop quality standards, strategy tactics, and systems for monitoring performance for multiple insurance transactions.

### **Zhejiang Financial Assets Exchange**

Hangzhou, China

Data Analyst Intern

Jul 2020 - Sept 2020

- Implemented unsupervised machine learning algorithms using R on customer data to segregate them into groups and predict their spending pattern.
- Onboarded 2 projects as part of the business development team by pitching details about various products.
- Developed a technical dashboard in Tableau to manage 53 client portfolios, improving the efficiency of processes such as credit modeling and monitoring systems by 27%.
- Assisted the team in number crunching and data structuring for the project using Tableau.

### **PROJECTS**

## 2020 Election Prediction, supervised by Prof. Samantha-Jo Caetano

Nov 2020 - Dec 2020

#### Group Leader

- Led a team of 3 to work on the final report and accurately predicted the Liberal Party to be the winner.
- Applied regression algorithm using *survey and lme4 packages* to train the model and used backward stepwise selection process to predict the results for the elections.

### Picture to Cross-Stitch Pattern Transformer, supervised by Prof. Daniel Simpson

Oct 2020 - Nov 2020

- Implemented K-means algorithm and multiple R functions (ggplot2, tidyverse packages) to extract the color component from the input image and convert the input image to lower resolution with a minimum decrease in the loss function.
- Deployed functions to output the corresponding cross-stitch pattern with different customizing options available.

### Analysis of Airbnb's Activity Level during Covid-19 Pandemic

July 2020

- Analyzed 70k+ Airbnb data of 3 cities using ANOVA testing to predict the pattern of the customers' bookings and destinations.
- Conducted regression algorithm and support vector machine algorithm to predict Airbnb activity trend under the effect of Covid-19 and assessed model performance by cross-validation.

### PROFESSIONAL SKILLS